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ATTACHMENT A

The Status of Polyethylene in the Sino-Soviet Bloc

There is a definite shortage of production of polyethylenes in the Sino-Soviet Bloc and an urgent need for the development of "know-how," designs, and plant equipment. Repeated attempts are being made to obtain these from the West. Polyethylene is of great importance at the present time for direct military uses, and has many indirect uses for military purposes. It is now the best material available for these purposes.

Five of the Bloc countries, USSR, East Germany, Poland, Czechoslovakia and Rumania, are carrying on active research and development on polyethylene. A very small quantity is being produced in East Germany and pilot plant quantities are being produced in Czechoslovakia; there is no production in the other countries.

USSR

The Soviets have expressed great interest in polyethylene production and in obtaining technical "know-how" in the United States, and have requested (or suggested) visits to American producers of this product. Negotiations have been undertaken in the past year with the Imperial Chemical Industry of England and the Max Planck Institute of West Germany for obtaining plant design and production "know-how." Published statements in the USSR claim that there have been delays in working out a simpler method for polyethylene production, and that the experimental plant in Yaroslavl is conducting experiments to set up production at atmospheric pressure (this will give polyethylenes of from 7,000 to 300,000 molecular weight).

EAST GERMANY

Polyethylene production has high priority in the planned research program of East Germany, but there is no evidence that results have gone beyond small plant production. The laboratory work of the VEB "Leuna" plant (Merseburg) with high-pressure and low-pressure polyethylene is said to be of considerable interest to Russian specialists.

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CZECHOSLOVAKIA

It is claimed in public statements that Czechoslovakia will go into production of polyethylene by the Zeigler low-pressure process in late 1956. The Czechs recently requested permission to send a delegation to visit United States plants producing polyethylene and polyethylene production equipment, and it is understood that a representative is now in the United States studying the packaging of materials in plastics for shipment to tropical areas. (This use has been developed by the Quartermaster Corps of the U.S. Army with the aid of the plastics producers. It is decidedly a military use.)

ROMANIA

Romania requested an exchange of delegations and permission to send a very high-level group of chemical specialists to inspect American plants producing polyethylene. This was turned down by the IAC Sub-Committee on Chemicals. However, within a short time, the same delegation from Romania came to the United States under a private sponsor. At the present time, the delegation is trying to visit the American plants to obtain production data and technical "know-how" on polyethylene. (They are also interested in the production of other major and important plastics.)

POLAND

Poland, as well as the above orbit countries, has shown great interest in plastics.

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